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PROJECT REPORT ON WIRELESS INTELLIGENT SENSOR NETWORK BASED SMART BUILDING FOR GREEN ENVIRONMENT AND SECURITY

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Abstract

Environmental degradation and global warming are among the major global challenges facing us. More and more appliances have been introduced for the comfort of humans which are contributing continuously to increase in global warming. Active involvement of the people is also required in reducing environmental degradation. It is found that Power generation, buildings including personal housing, commercial buildings and offices, Industries and Transport play a major role in global warming through the emission of green house gases. Judicious use of light, television, refrigerator , Air conditioners, Fans etc by people in the building will help a lot.

Studies assessing the impact of smart sensor based network technology in reducing greenhouse gas emissions reveal that the technology has a high potential to contribute to a reduction of emissions across various fields of application.

Modern technologies like *Smart grids and smart power systems* in the energy sector can have major impacts on improving energy distribution and optimizing energy usage. *Smart Buildings* can contribute to major reductions of energy use in hundreds of millions of buildings (houses, commercial complexes, offices and Industries. *Smart transportation systems* are a powerful way of organizing traffic more efficiently and reducing CO2 emissions.

Studies clearly estimate an overall strong positive effect in smart grids, smart buildings, smart industrial applications as well as precision agriculture and farming.